

What is claimed is:

1. A dental implant system comprising an expandable polymer sheath suitable for placement within a jawbone; and
5 a rigid implant fitting within the polymer sheath and causing expansion of the polymer sheath when fitted within the sheath.
2. A system as in claim 1 wherein the polymer is Ultra High Molecular Weight Polyethylene.
3. A system as in claim 1 wherein the polymer is Polypropylene.
4. A system as in claim 1 wherein the polymer is High Density Polyethylene.
5. A system as in claim 1 wherein the polymer is Polyurethane Elastomer.
6. A system as in claim 1 wherein the implant is made of titanium or an alloy thereof.
7. A system as in claim 1 wherein the implant is made of stainless steel or an alloy thereof.
8. A system as in claim 1 wherein the polymer sheath has an exterior surface that is ribbed.
9. A system as in claim 1 wherein the polymer sheath has an interior surface that is threaded, and
5 wherein the implant has an exterior surface that is threaded, and
whereby the interior surface of the polymer sheath mates with the exterior surface of the

implant when the implant is fitted within the polymer sheath.

10. A system as in claim 1 wherein the implant is tapered.

11. A system as in claim 1 wherein the implant is ribbed.

12. A system as in claim 1 further comprising an abutment adapted to be fixed to the rigid implant, the abutment permitting attachment of a dental prosthesis.

13. A system as in claim 12 wherein the polymer sheath, the implant, and the abutment, when coupled together and inserted within a jawbone, form a support structure that permits
5 attachment of a dental prosthesis.

14. A system as in claim 13 wherein the prosthesis is a single crown.

15. A system as in claim 13 wherein the prosthesis is a bridge.

16. A system as in claim 13 wherein multiple support structures support a dental prosthesis.

17. A system as in claim 16 wherein the prosthesis is a bridge.

18. A system as in claim 1 wherein expansion of the sheath upon insertion of the implant results in immediate stability of the sheath within the jaw bone.

19. A system as in claim 13 wherein the support structure and prosthesis can be inserted in a single office visit.

20. A method of installing a dental prosthesis comprising the steps of:

Sub

A1

Patented July 1, 1964

5 providing a system as in claim 11;
preparing a site within a jawbone;
inserting the polymer sheath into the
prepared site;

inserting the implant within the sheath,
thereby causing expansion of the sheath within the
jawbone;

10 coupling the abutment to the implant;
whereby the sheath, the implant, and the abutment form
a support structure for a dental prosthesis; and
attaching a dental prosthesis to the
abutment.

21. A method as in claim 20
wherein the prosthesis is a crown.

22. A method as in claim 20
wherein the prosthesis is a bridge.

23. A method as in claim 20 comprising the
further step of:
implanting a plurality of support structures
into the jawbone.

24. A method as in claim 23 further
comprising the step of
attaching a bridge to the support
structures.

5 25. A method of inserting a dental implant
comprising the steps of
providing a system as in claim 1;
preparing a site within a jawbone; and
inserting the polymer sheath into the
prepared site; and

inserting the implant within the sheath,
thereby causing expansion of the sheath within the
jawbone.

add 17

Sub
A

11/11/11